

Application No.: 09/901,317
Art Unit: 2143

Attorney Docket No.: 2000-0280-CON

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

By this amendment, claims 3-18, 20-22 and 24-28 remain pending, claims 1, 2, 19 and 23 having been canceled without prejudice or disclaimer, claims 3, 4, 6, 9-18, 20-22 and 24 having been amended and claims 25-28 having been added.

Rejection of Claims 1-4 and 19

On page 2 of the Office Action, the Examiner rejected claims 1-4 and 19 under 35 U.S.C. 102(e) as allegedly being anticipated by U.S. Patent No. 6,185,619 to Joffe et al. ("Joffe"). Applicants canceled claims 1, 2 and 19 without prejudice or disclaimer, thereby making the rejection of claims 1, 2 and 19 moot. Applicants, therefore, respectfully request that the rejection of claims 1, 2 and 19 be withdrawn. Claim 3 was amended to be in independent form to include the features of claim 1 and claim 4 was amended to depend from claim 3 instead of canceled claim 1. Applicants traverse the rejection with respect to claims 3 and 4.

Amended independent claim 3 is directed to a method of serving content in a packet switching network. The method includes, among other things, choosing from a plurality of content distribution networks which content distribution network will respond to a content request from a client, wherein the content distribution network is chosen based, at least partly, on a determination of which of the plurality of content distribution networks is closer to the client. On page 3 of the Office Action, the Examiner alleged that Joffe, at col. 11, line 65 through col. 12, line 19, discloses or suggests that the content distribution network is chosen based on a determination of which of the plurality of content distribution networks is closer to the client. Applicants respectfully disagree.

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Joffe, at col. 11, line 65 through col. 12, line 19, discloses:

The Ping Manager tells the Director which content server has the fastest ICMP echo path. This data is collected by the Ping Manager 364. The Ping Manager receives its ping-time data from individual server machines which are each using ICMP pings to determine the ICMP routing time between themselves and the browsing client's machine. The Ping Manager then stores this information and reports it to the Director, which uses it to make decisions about the best route.

The Ping Daemon executes on server machines associated with each content server machine cluster. A content server machine (or cluster of them) resides near each of the Network Access Points. The Ping Daemon waits for a ping request (and its corresponding IP address, which is the browsing client's IP address) and then pings the browsing client's IP address to record the ICMP routing time through its own closest border router. It then sends this data back to the Ping Manager.

The Load Manager software is similar to the Ping Manager, but reports and stores information from the Load Daemon about each of the content server machines' current load. It forwards this data to the Director as well.

Thus, Joffe discloses that a Ping Daemon executes on server machines associated with content server machine clusters. The Ping Daemon waits for a ping request from a browsing client and subsequently, pings the browsing client's Internet Protocol (IP) address to record the Internet Control Message Protocol (ICMP) routing time through its closest boarder router. This data is then sent to the Ping Manager, which reports it to a Director. The Director uses this data to make decisions about a best route. Thus, Joffe discloses or suggests choosing a "best" route based on a route having a fastest ICMP routing time.

Applicants submit that the Examiner equates determining a "best" route based on a route having a fastest ICMP routing time with determining which of a plurality of content distribution networks is closer to the client. Applicants disagree with the Examiner.

Applicants submit that if all communication links of the network operated at a same speed and if all components of the network operated under the same conditions, then determining a route having a fastest ICMP routing time may provide an indication of which server is closest to a browsing client. However, in reality, different communication links of a network may, and usually do operate at different speeds and all components of a network do

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not operate under the same conditions. For example, communication links may operate at different rates and, in some cases, may not operate at all in the event of a failure. Further, all network components do not operate under the same conditions. For example, different components operate with different processors and architectures, thereby making their processing speed, and consequently, their response time for responding to a ping request vary. Further, some communication links and/or devices may be operating at or near congested conditions, thereby increasing the time for responding to a ping request. Thus, depending on network and communication link conditions, it is quite possible and not unusual for a route having a fastest ICMP routing time to be a route from a browsing client to a server that is not necessarily the closest server to the browsing client. Thus, because the fastest route is not necessarily an indication of a route that is closer to a client, Applicants submit that Joffe is completely devoid of any disclosure or suggestion of choosing from a plurality of content distribution networks which content distribution network will respond to a content request from a client, wherein the content distribution network is chosen based, at least partly, on a determination of which of the plurality of content distribution networks is closer to the client, as required by amended independent claim 3.

For at least the reasons discussed above, Applicants submit that Joffe does not disclose or suggest each and every feature of claim 3 and respectfully request that the rejection of claim 3 be withdrawn.

Claim 4 was amended to depend from claim 3 and was further amended to broaden the scope of the claim. Applicants submit that claim 4 is not anticipated by Joffe for at least the reasons discussed with respect to claim 3. Therefore, Applicants respectfully request that the rejection of claim 4 be withdrawn.

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Rejection of Claims 5-18 and 20-24

On page 4 of the Office Action, the Examiner rejected claims 5-18 and 20-24 under 35 U.S.C. 103(a) as allegedly being unpatentable over Joffe in view of U.S. Patent No. 6,578,066 to Logan et al. ("Logan"). Applicants amended the claims to place them in better form. Further, claims 11 and 16 were amended to depend from claim 5, instead of canceled claim 1. Claim 23 was canceled without prejudice or disclaimer, thereby making the rejection of this claim moot. Applicants, therefore, respectfully request that the rejection of claim 23 be withdrawn. Applicants respectfully traverse the rejection with respect to the remaining claims.

Claim 5 depends from claims 4 and 3, and further recites that the content distribution network is chosen only if the measured load on the content distribution network does not exceed a predetermined capacity reserved on the content distribution network. On page 4 of the Office Action, the Examiner admitted that Joffe is silent with respect to the content distribution network being chosen only if the measured load on the content distribution network does not exceed a predetermined capacity reserved on the content distribution network. The Examiner relied on Logan, at col. 9, lines 54-67, to disclose or suggest this feature. Applicants respectfully disagree with the Examiner.

Logan, at col. 9, lines 54-67, discloses:

For session hand-off execution, when a switch receives a domain name server request for a domain name that it is hosting, it will respond with the appropriate IP-addresses of the switches that are load balancing those domains, based on hand-off weights, availability, etc. It is important to take into account the physical proximity when doing a hand-off. Generally, it is preferably best if users within a region are associated with servers in or near that region, unless the nearby server is down or overloaded. For example, let's say there are five sites that host content for "www.akeon.com" installed all over the world: San Jose (West-US); Atlanta (East-US), Ecuador (South America), Paris (France), and Tokyo (Japan). Users in Europe are preferably served by the Paris site, users in Chile are preferably served by the Ecuador site, etc.

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Thus, Logan discloses it is best if users within a region are associated with servers in or near that region, unless the nearby server is down or overloaded. Applicants submit that users being associated with nearby servers, unless the nearby servers are down or overloaded is not equivalent to choosing the content distribution network if a measured load on the content network distribution network does not exceed a predetermined capacity reserved on the content distribution network. Logan is silent regarding any capacity being reserved on a content distribution network. Even if one were to assume that the predetermined capacity is the entire capacity of the server, Logan is completely silent regarding reserving the predetermined capacity on the content distribution network.

For at least the above-mentioned reasons, Applicants submit that neither Joffe nor Logan discloses or suggests, either separately or in any combination, that the content distribution network is chosen only if the measured load on the content distribution network does not exceed a predetermined capacity reserved on the content distribution network, as required by claim 5. Therefore, Applicants respectfully request that the rejection of claim 5 be withdrawn.

Claims 11-18 depend from claim 5 and are patentable over Jaffe and Logan for at least the reasons discussed with respect to claim 5. Therefore, Applicants respectfully request that the rejection of claims 11-18 be withdrawn.

Amended claim 6 depends from claim 3 and further recites that the content to be served by the chosen content distribution network comprises content embedded in a document to be served to the client and wherein redirecting the client to the chosen content distribution network further comprises rewriting references to the embedded content before serving the document to the client. On page 5 of the Office Action, the Examiner alleged that Logan, at col. 3, lines 8-11, discloses that the content to be served by the chosen content